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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,907	10/01/2001	Hitoshi Arita	214635US0	5663

22850 7590 11/19/2003

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EXAMINER	
FAISON, VERONICA F	
ART UNIT	**PAPER NUMBER**
1755	

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/966,907	ARITA ET AL.	
	Examiner	Art Unit	
	Veronica F. Faison	1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 August 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-220* is/are pending in the application.

4a) Of the above claim(s) *8-34, 41-220* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 35-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, claims 1-7 and 35-40 in Paper No. 10 is acknowledged. The traversal is on the ground(s) that the Office has not provided adequate reasons and/or examples to support a conclusion of patentable distinctness between the identified groups. This is not found persuasive because of the following:

1. With regards to Applicant's argument directed to Groups I-VI, the Examiner would like to point out that each ink composition of Groups I-VI are unrelated because each individual ink composition requires a different corrosion inhibitor resulting in a materially different ink composition,
2. With regards to Applicant's argument directed to Groups I-VI and Group VII as related as product and process of use. Applicant states that "the Office merely stated that the "different inventions can be used separately" without further arguments of examples". The Examiner would like to point Applicant to pages, 4-7 wherein the Examiner states that "In the instant case the ink composition can be used in a materially different process such as lithographic printing.
3. With regards to Applicant's argument that the search of all the claims would not impose a serious burden on the Office. This is a serious burden of the Office because divergent subject matter that has acquired a separate status in the art as shown by their different classification and that search required for one group in not required for another group.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 35-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 35 does not contain a structure of formula 1, therefore it is unclear to the Examiner what phosphonium ion is being claimed. Please clarify.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-24, 28, 30, 33-35 and 38-42 of copending Application No. 10/050,942 (US 2003/0010252). Although the conflicting claims are not identical, they are not patentably distinct from

each other because the claims of the present application overlap claims of US 2003/0010252 and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

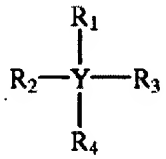
> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al (US Patent 6,637,875) in view of Yamamuro et al (US Patent 4,700,203).

Kaneko et al teach an aqueous ink composition comprising a colorant, 2,2,4-trimethyl-1,3-pentanediol and a polyoxyethylene alkyl ether acetate surfactant in the form of a salt with M wherein a sodium cation, lithium cation, and/or a cation of

quaternary ammonium, quaternary phosphonium or alkanolamine represented by the general formula



wherein Y represents a nitrogen atom or a phosphorus atom, R_1 to R_4 each represent a hydrogen atom, an alkyl group, a hydroxyalkyl group, and an alkyl group halide. The alkyl is preferably a lower alkyl having 1 to 4 carbon atoms is used as the counter ion M (col. 5 lines 42-61). When the above surfactant is used the dissolution stability is further enhanced. The colorant present in the ink composition may be a dye or pigment present in the amount of 0.5 to 25 present by weight (col. 10 line 38+). The ink composition may contain conventionally known additives in addition to the colorant, the wetting agent and the surfactant in an amount that does not deteriorate the effects of the ink (col. 14 lines 61-65). A pH regulator is present as long as it can adjust the pH of the ink composition to a desired value without giving an adverse effect. The reference remains silent to the amount of phosphonium ion based on the equivalent of an anionic compound, however it appears to the Examiner that with the amount of anionic compound present in the ink composition that the amount of phosphonium would overlap the claimed range. The reference further teaches a recording method of forming an image on a recording medium by ejecting and jetting a plurality of aqueous recording liquids as droplets from one ejection nozzle or separated ejection nozzles and an ink jet apparatus (col. 18 lines 25+). Kaneko et al fails to teach the specific

materials set forth in claims 1 and 35. Kaneko et al fails to specifically exemplify the phosphonium ion as claimed by applicant. Therefore, it would have been obvious to one of ordinary skill in the art to use the phosphonium ion as claimed by applicant as Kaneko et al also discloses the phosphonium but shows no example incorporating them.

Yamamuro et al teach an ink jet head for compressing ink in an ink chamber to eject a drop of the ink from a nozzle (abstract and col. 4 lines 9-30). The reference further teaches that the housing is prepared by etching a photosensitive glass to form the nozzles, ink chambers, ink supply section, etc. is rigidly connected to the protective layer by mechanical means or chemical means as bonding such that the ink chambers face the conductive layers in one-to-one correspondence (col. 7 line 63-col. 8 line 50). Therefore it would have been obvious to one of ordinary skill in the art to use the materials disclosed by Yamamuro et al in Kaneko et al because Kaneko et al broadly discloses a printing apparatus.

Claims 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al (US Patent 6,637,875) in view of Yamamuro et al (US Patent 4,700,203) in further view of Stoffel et al (US Patent 4,994,110).

Kaneko et al and Yamamuro et al are described above, but fail to teach alkali metals.

Stoffel et al teach an ink for ink jet printing wherein the presence of sodium (alkali metal) should be present in the amount of about 500 ppm or less to avoid crusting of the orifices (col. 4 lines 12-38). Therefore it would have been obvious to one of ordinary

skill in the art to decrease the amount of alkali metal present in the ink composition to reduce the crusting of the orifice.

Conclusion

The remaining references listed on forms 892 and 1449 have been reviewed by the Examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 703-305-3918. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 703-308-3823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

After the move to new USTPO headquarters in Alexandria, VA, tentatively scheduled for the week of December 22, 2003, the Examiner's new phone number will be (571) 272-1366 and Mr. Bell's new phone number will be (571) 272-1362.

Veronica F. Faison

Helene Klemanski

HELENE KLEMANSKI
PRIMARY EXAMINER
GROUP 1100